

# READ THIS FIRST

## Model W1752

### \*\*\*IMPORTANT UPDATE\*\*\*

Applies to Models Mfg. Since 8/12  
and Owner's Manual August, 2010

Phone #: (360) 734-3482 • Tech Support: tech-support@shopfox.biz • Web: www.shopfox.biz



The following changes were recently made to this machine since the owner's manual was printed:

- Now certified to meet CSA 22.2 #71.2-08 and UL 987-7th standards.
- Changed the motor nominal voltage from 110V to 120V.

This document provides relevant updates to portions of the owner's manual that no longer apply and additional information required by CSA—aside from this information, all other content in the owner's manual applies and **MUST** be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference. If you have any further questions, contact our Technical Support.**

## Changed Specifications

### Electrical

Power Requirement ..... 120V, Single-Phase, 60 Hz

### Motor

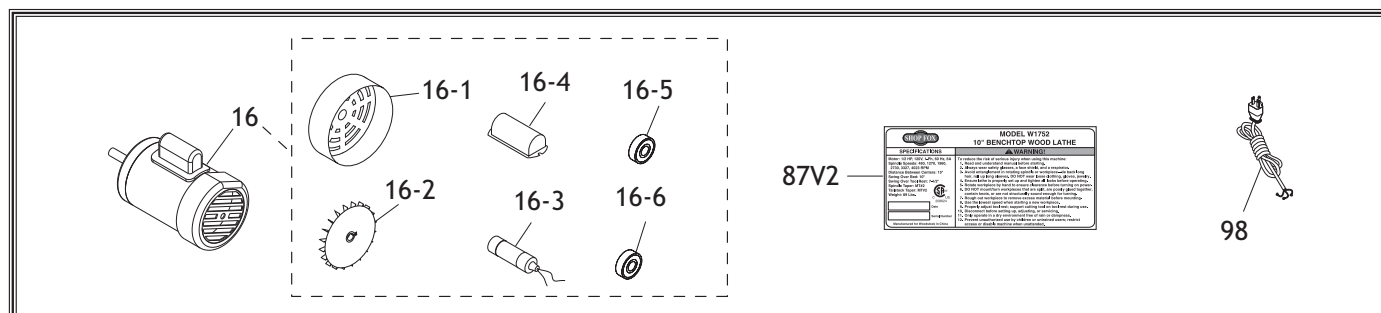
Voltage ..... 120V

Amps ..... 6A

### Operation Info

Cutterhead Speed ..... 480-4800 RPM

## New/Revised Parts



REF	PART #	DESCRIPTION
16	X1752016	MOTOR 1/2HP 120V 1-PH
16-1	X1752016-1	MOTOR FAN COVER
16-2	X1752016-2	MOTOR FAN
16-3	X1752016-3	S CAPACITOR 25M 250V
16-4	X1752016-4	CAPACITOR COVER

REF	PART #	DESCRIPTION
16-5	XP620ZZZ	BALL BEARING 620ZZZ
16-6	XP6200ZZ	BALL BEARING 6200ZZ
87V2	X1752087V2	MACHINE ID LABEL CSA V2.08.12
98	X1752098	POWER CORD 18G 3W 72" 5-15P



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# SAFETY

## For Your Own Safety, Read Manual Before Operating Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures—this responsibility is ultimately up to the operator!



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.

### NOTICE

This symbol is used to alert the user to useful information about proper operation of the equipment or a situation that may cause damage to the machinery.

## Standard Machinery Safety Instructions

**OWNER'S MANUAL.** Read and understand this owner's manual **BEFORE** using machine.

**TRAINED OPERATORS ONLY.** Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

**DANGEROUS ENVIRONMENTS.** Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

**MENTAL ALERTNESS REQUIRED.** Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

**ELECTRICAL EQUIPMENT INJURY RISKS.** You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow an electrician or qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

**DISCONNECT POWER FIRST.** Always disconnect machine from power supply **BEFORE** making adjustments, changing tooling, or servicing machine. This eliminates the risk of injury from unintended startup or contact with live electrical components.

**EYE PROTECTION.** Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.

**WEARING PROPER APPAREL.** Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips, which could cause loss of workpiece control.

**HAZARDOUS DUST.** Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

**HEARING PROTECTION.** Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

**REMOVE ADJUSTING TOOLS.** Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

**INTENDED USAGE.** Only use machine for its intended purpose and never make modifications not approved by Woodstock. Modifying machine or using it differently than intended may result in malfunction or mechanical failure that can lead to serious personal injury or death!

**AWKWARD POSITIONS.** Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

**CHILDREN & BYSTANDERS.** Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

**GUARDS & COVERS.** Guards and covers reduce accidental contact with moving parts or flying debris—make sure they are properly installed, undamaged, and working correctly.

**FORCING MACHINERY.** Do not force machine. It will do the job safer and better at the rate for which it was designed.

**NEVER STAND ON MACHINE.** Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

**STABLE MACHINE.** Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

**USE RECOMMENDED ACCESSORIES.** Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase risk of serious injury.

**UNATTENDED OPERATION.** To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

**MAINTAIN WITH CARE.** Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

**CHECK DAMAGED PARTS.** Regularly inspect machine for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating machine.

**MAINTAIN POWER CORDS.** When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside, resulting in a short. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

**EXPERIENCING DIFFICULTIES.** If at any time you experience difficulties performing the intended operation, stop using the machine! Contact Technical Support at (360) 734-3482.

# Additional Safety for Wood Lathes

**MAIN INJURY HAZARDS:** Death or crushing injury from getting entangled in rotating spindle or workpiece; death, blindness, or broken bones from being struck by a workpiece that breaks apart or comes loose during rotation, turning tool kickback, or flying wood chips. To minimize your risk of these hazards, always heed the following warning information:

**INTEGRITY OF STOCK.** Verify each workpiece is free of knots, splits, nails, or foreign material to ensure it can safely rotate on spindle without breaking apart or causing turning tool kickback.

**WORKPIECE PREPARATION.** Before mounting, cut off waste portions with a bandsaw or other tool to ensure workpiece has no large edges to catch turning tool, and it will rotate without dangerous wobbling.

**SECURING LOCKS.** Verify tool rest, headstock, and tailstock are secure before turning lathe **ON**.

**SECURING WORKPIECE.** An improperly secured workpiece can fly off spindle with deadly force. Use proven setup techniques and always verify workpiece is well-secured before starting lathe. Only use high-quality fasteners with non-tapered heads for faceplate attachment.

**TOOL SUPPORT.** An improperly supported tool may be grabbed or ejected. Adjust tool rest approximately  $\frac{1}{4}$ " away from workpiece and  $\frac{1}{8}$ " above workpiece center line to provide proper support for turning tool. Firmly hold turning tool with both hands against tool rest.

**TOOL KICKBACK.** Occurs when turning tool is ejected from workpiece with great force, striking operator or bystanders. Commonly caused by poor workpiece selection/preparation, improper tool usage, or improper machine setup or tool rest adjustment.

**ADJUSTMENT TOOLS.** Remove all chuck keys, wrenches, and adjustment tools before turning lathe **ON**. A tool left on the lathe can become a deadly projectile when spindle is started.

**SAFE CLEARANCES.** Before starting spindle, verify workpiece has adequate clearance by hand-rotating it through its entire range of motion.

**EYE/FACE PROTECTION.** Always wear a face shield and safety glasses when operating lathe.

**PROPER APPAREL.** Do not wear gloves, necktie or loose clothing. Keep long hair away from rotating spindle.

**SPEED RATES.** Select correct spindle speed for workpiece size, type, shape, and condition. Use low speeds when roughing or when turning large, long, or non-concentric workpieces. Allow spindle to reach full speed before turning.

**NEW SETUPS.** Test each new setup by starting spindle rotation at the lowest speed and standing to the side of the lathe until workpiece reaches full speed and you can verify safe rotation.

**ROUGHING.** Use correct tool. Take light cuts, use low speeds, and firmly support tool with both hands.

**SHARP TOOLS.** Only use sharp turning tools—they cut with less resistance than dull tools. Dull turning tools can catch or grab and pull your hands into the rotating workpiece.

**STOPPING SPINDLE.** Always allow spindle to completely stop on its own. Never put hands or another object on spinning workpiece.

**ADJUSTMENTS/MAINTENANCE.** Make sure wood lathe is turned **OFF**, disconnected from power, and all moving parts are completely stopped before doing adjustments or maintenance.

**MEASURING WORKPIECE.** Only measure workpiece after it has stopped. Trying to measure a spinning workpiece increases entanglement risk.

**SANDING/POLISHING.** To reduce entanglement risk, remove tool rest before sanding. Never completely wrap sandpaper around workpiece.

# ELECTRICAL

## Circuit Requirements

This machine must be connected to the correct size and type of power supply circuit, or fire or electrical damage may occur. Read through this section to determine if an adequate power supply circuit is available. If a correct circuit is not available, a qualified electrician **MUST** install one before you can connect the machine to power.

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

### Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating at 120V ..... 6 Amps

### Circuit Requirements

This machine is prewired to operate on a 120V power supply circuit that has a verified ground and meets the following requirements:

Circuit Type ..... 120V, 60 Hz, Single-Phase  
Circuit Size ..... 15 Amps  
Plug/Receptacle ..... NEMA 5-15

## WARNING

The machine must be properly set up before it is safe to operate. **DO NOT** connect this machine to the power source until instructed to do later in this manual.

## WARNING



Incorrectly wiring or grounding this machine can cause electrocution, fire, or machine damage. To reduce this risk, only an electrician or qualified service personnel should do any required electrical work on this machine.

## NOTICE

The circuit requirements listed in this manual apply to a dedicated circuit—where only one machine will be running at a time. If this machine will be connected to a shared circuit where multiple machines will be running at the same time, consult with an electrician to ensure that the circuit is properly sized for safe operation.

# Grounding Requirements

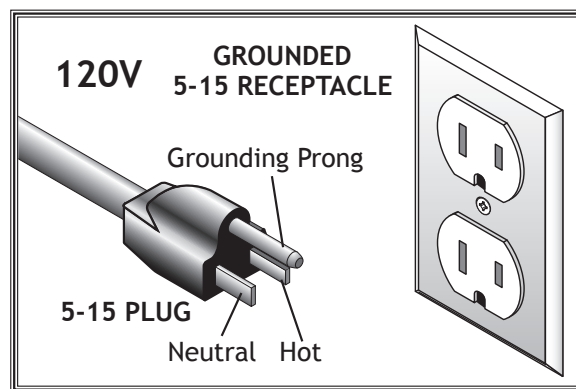
This machine **MUST** be grounded. In the event of certain types of malfunctions or breakdowns, grounding provides a path of least resistance for electric current to travel—in order to reduce the risk of electric shock.

Improper connection of the equipment-grounding wire will increase the risk of electric shock. The wire with green insulation (with/without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

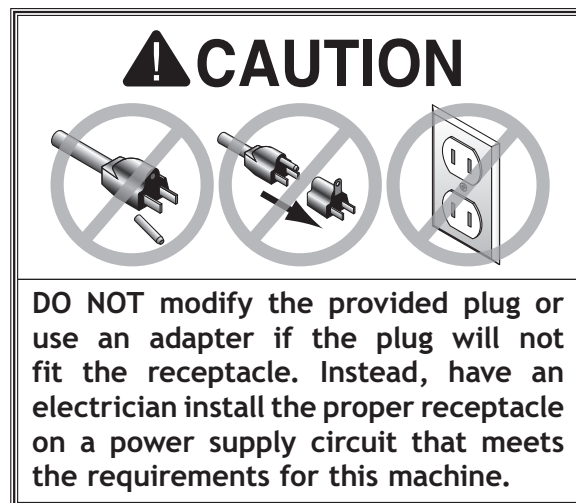
Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

## For 120V Connection

This machine is equipped with a power cord that has an equipment-grounding wire and NEMA 5-15 grounding plug. The plug must only be inserted into a matching receptacle (see **Figure**) that is properly installed and grounded in accordance with local codes and ordinances.



**Figure 1.** NEMA 5-15 plug & receptacle.



# Extension Cords

We do not recommend using an extension cord with this machine. Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases with longer extension cords and smaller gauge sizes (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

**Minimum Gauge Size at 120V** ..... 14 AWG  
**Maximum Length (Shorter is Better)** ..... 50 ft.



# Wiring Diagram

**⚠ DANGER**  
Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

COLOR KEY	
BLACK	
WHITE	
GREEN	
RED	

## PADDLE SWITCH (viewed from behind)

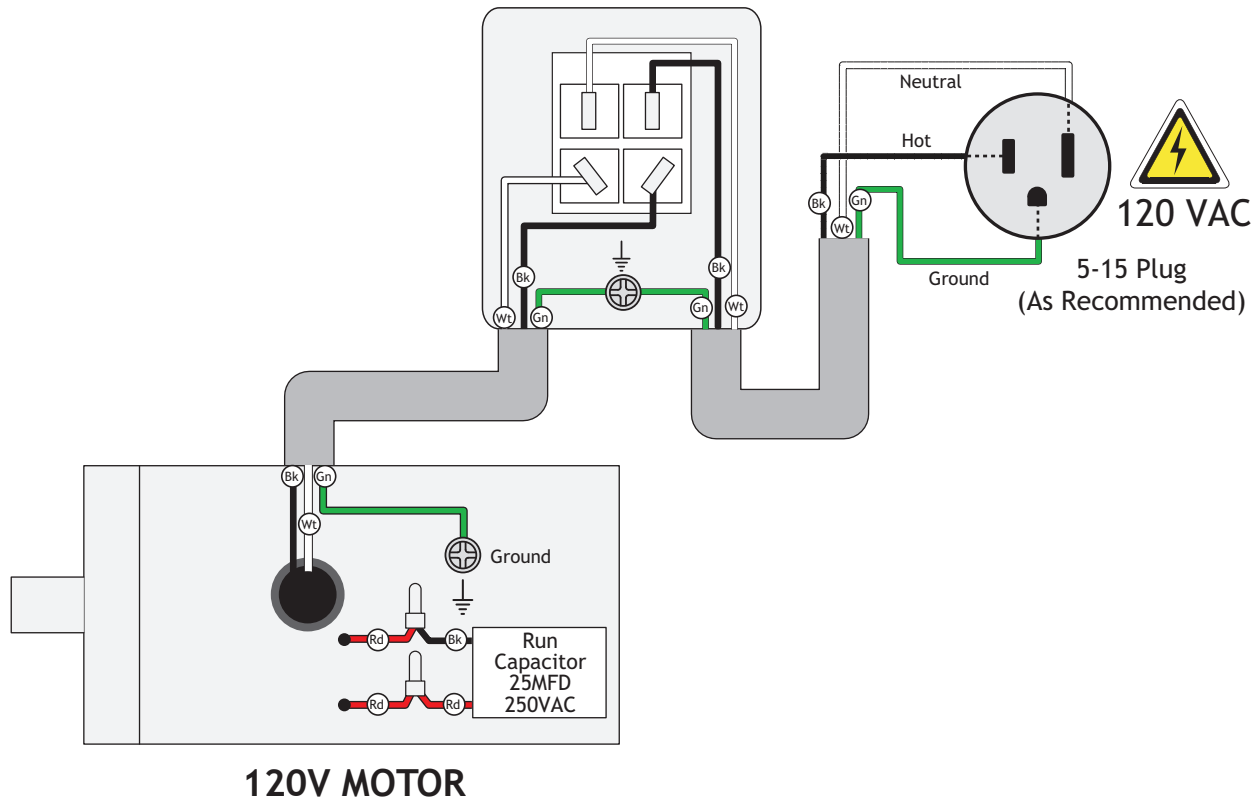


Figure 2. Motor connections.

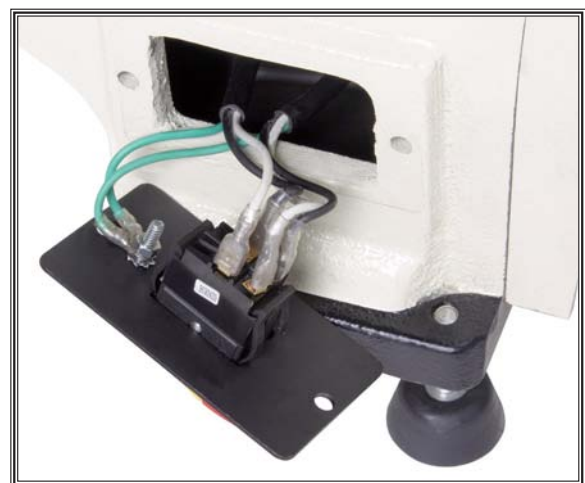


Figure 3. Switch connections.



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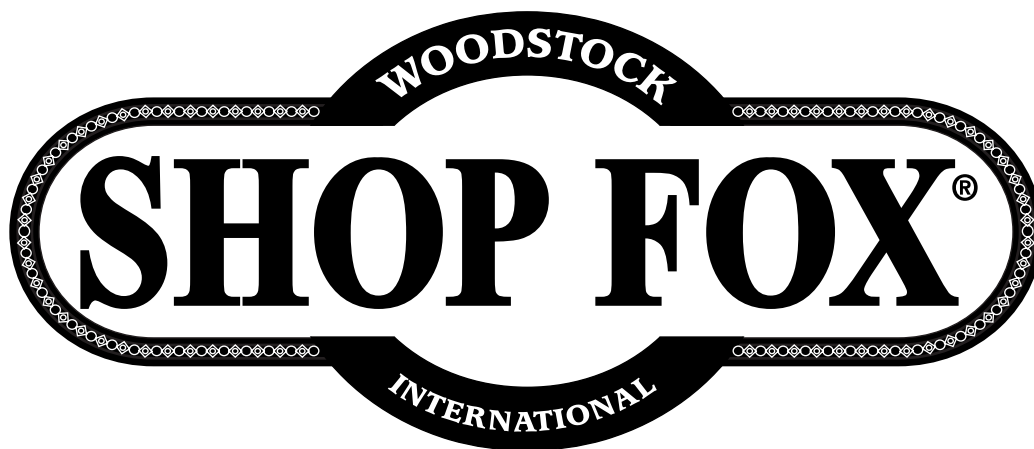
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**SHOPFOX.BIZ**





# MODEL W1752 MINI WOOD LATHE



## OWNER'S MANUAL

*(FOR MODELS MANUFACTURED SINCE 1/07)*

Phone: (360) 734-3482 • Online Technical Support: [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz)

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## **WARNING!**

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



## **WARNING!**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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# INTRODUCTION

## Woodstock Technical Support

Your new **SHOP FOX®** Mini Wood Lathe has been specially designed to provide many years of trouble-free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation.

Woodstock International, Inc. is committed to customer satisfaction. Our intent with this manual is to include the basic information for safety, setup, operation, maintenance, and service of this product.

We stand behind our machines! In the event that questions arise about your machine, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz). Our knowledgeable staff will help you troubleshoot problems and process warranty claims.

If you need the latest edition of this manual, you can download it from <http://www.shopfox.biz>.  
If you have comments about this manual, please contact us at:

Woodstock International, Inc.  
Attn: Technical Documentation Manager  
P.O. Box 2309  
Bellingham, WA 98227

# MACHINE SPECIFICATIONS



Phone #: (360) 734-3482 • Online Tech Support: tech-support@shopfox.biz • Web: www.shopfox.biz

## MODEL W1752 MINI WOOD LATHE

### Motor

Type .....	Capacitor Start
Horsepower .....	1/2 HP
Voltage .....	110V
Phase .....	Single
Amps .....	6A
Speed .....	1725 RPM
Cycle .....	60 Hz
Number Of Speeds .....	1
Power Transfer .....	Belt Drive
Bearings .....	Shielded and Lubricated

### Electrical

Switch .....	Paddle Type w/Lockout Key
Switch Voltage .....	110V
Cord Length .....	8.2 ft.
Cord Gauge .....	18 gauge
Recommended Circuit Breaker Size .....	15 amp
Plug .....	5-15

### Overall Dimensions

Weight .....	89 lbs.
Length/Width/Height .....	34" x 8 <sup>3</sup> / <sub>4</sub> " x 15"
Foot Print (Length/Width) .....	33" x 8 <sup>3</sup> / <sub>4</sub> "
Type .....	Cardboard
Content .....	Machine
Weight .....	113 lbs.
Length/Width/Height with Optional Model W1753 Extension .....	60" x 8 <sup>3</sup> / <sub>4</sub> " x 15"

**Main Specifications**

Swing Over Bed .....	10"
Swing Over Tool Rest.....	7 <sup>1</sup> / <sub>2</sub> "
Distance Between Centers .....	15"
Spindle Size.....	7 <sup>51</sup> / <sub>64</sub> " x 1 <sup>7</sup> / <sub>8</sub> "
Spindle TPI.....	1" x 8 TPI
Outboard Spindle Size.....	1"
Spindle Bore .....	2 <sup>3</sup> / <sub>64</sub> "
Spindle Taper.....	MT#2
Tailstock Taper .....	MT#2
Tailstock Center.....	5"
Number of Spindle Speeds .....	6
Range of Spindle Speeds.....	480, 1270, 1960, 2730, 3327, 4023 RPM
Bed Width.....	8 <sup>3</sup> / <sub>16</sub> "
Faceplate Size .....	3"
Bed Construction .....	Cast Iron
Frame Construction .....	Cast Iron and Steel
Headstock Construction.....	Cast Iron and Steel
Tailstock Construction .....	Cast Iron and Steel

**Other Specifications**

Country Of Origin.....	China
Warranty .....	2 Years
Serial Number Location.....	Data Label on Headstock
Assembly Time .....	10 Minutes
Sound Rating .....	Less than 80 dB



# Controls and Features

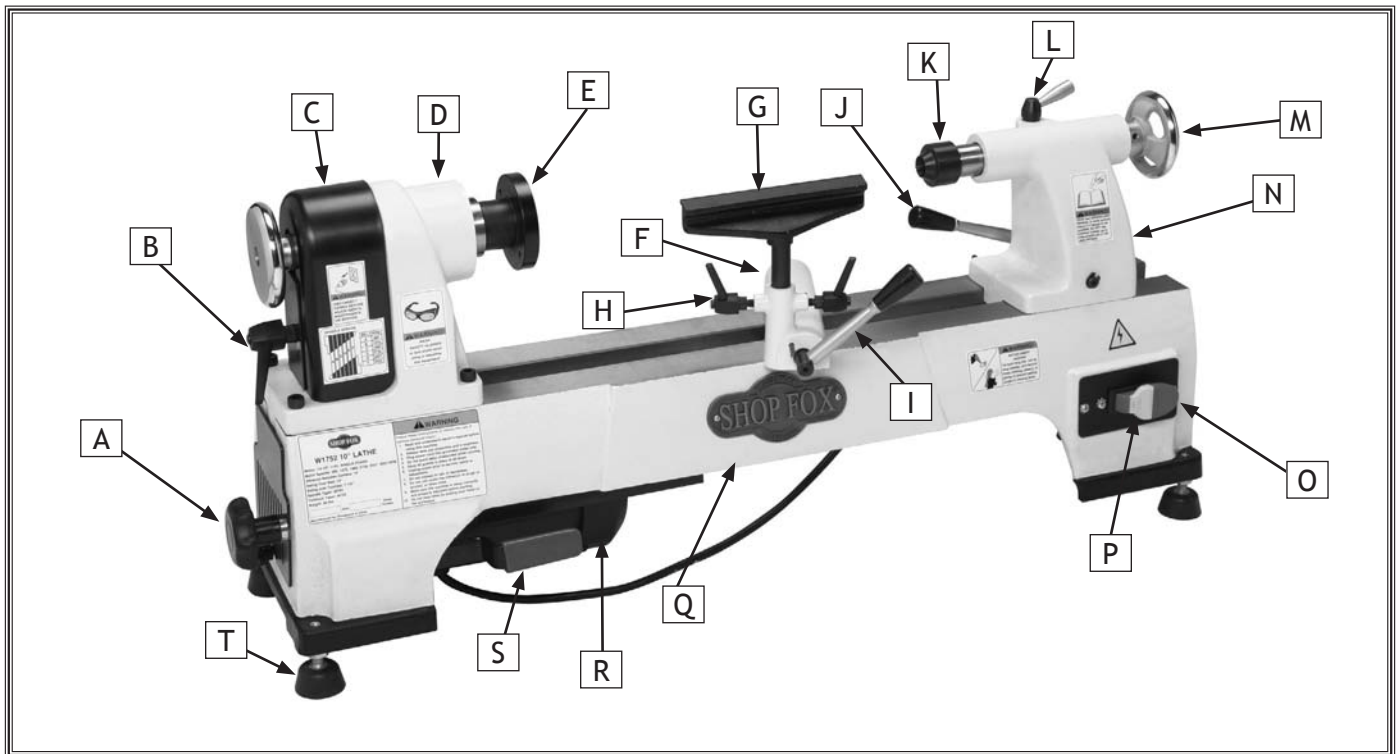


Figure 1. W1752 controls and features.

- A. Belt Tension Lock Knob
- B. Belt Cover Lock Handle
- C. Belt Cover
- D. Headstock
- E. Faceplate
- F. Tool Rest Base
- G. Tool Rest
- H. Tool Rest Lock Handle
- I. Tool Rest Release Lever
- J. Tailstock Release Lever
- K. Live Center
- L. Quill Lock Handle
- M. Quill Handwheel
- N. Tailstock
- O. ON/OFF Switch
- P. Safety Key
- Q. Lathe Bed
- R. Motor
- S. Belt Tension Lever
- T. Foot

# SAFETY

**READ MANUAL BEFORE OPERATING MACHINE.  
FAILURE TO FOLLOW INSTRUCTIONS BELOW WILL  
RESULT IN PERSONAL INJURY.**

## **DANGER**

Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

## **WARNING**

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

## **CAUTION**

Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.

## **NOTICE**

This symbol is used to alert the user to useful information about proper operation of the equipment, and/or a situation that may cause damage to the machinery.

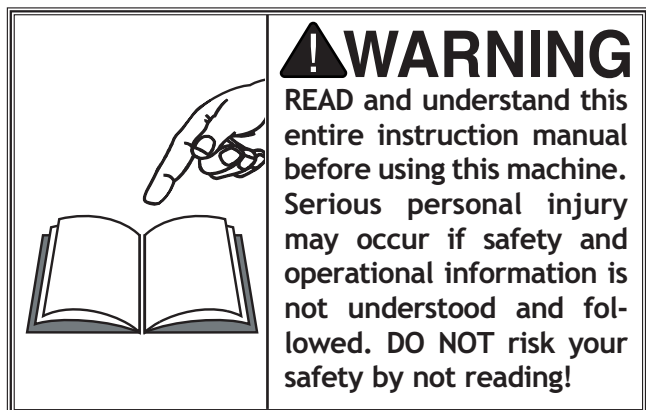
## Standard Safety Instructions

1. **READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eye-glasses only have impact resistant lenses—they are NOT safety glasses.
3. **ALWAYS WEAR AN NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
6. **NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.
7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power off and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords over-heat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery ON.
18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.
19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
22. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
25. **BE AWARE THAT CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Make sure you know the hazards associated with the type of dust you will be exposed to and always wear a respirator approved for that type of dust.

# Additional Safety for Wood Lathes

## SAFETY



1. **KEEPING GUARDS IN PLACE.** Make sure all guards are in place and that the lathe sits on a flat, stable surface.
2. **EYE/FACE PROTECTION.** Always wear eye protection or a face shield when operating the lathe.
3. **RESPIRATORY PROTECTION.** Always wear a respirator when using this machine. Wood dust may cause allergies or long-term respiratory health problems.
4. **MOUNTING WORKPIECE.** Before starting, be certain the workpiece has been properly imbedded on the headstock and tailstock centers and that there is adequate clearance for the full rotation.
5. **WORKPIECE CONDITION.** Always inspect the condition of your workpiece. **DO NOT** turn pieces with knots, splits, and other potentially dangerous conditions. Make sure joints of glued-up pieces have high quality bonds and won't fly apart during operation.
6. **ADJUSTING TOOL REST.** Adjust tool rest to provide proper support for the turning tool you will be using. Test tool rest clearance by rotating workpiece by hand before turning lathe **ON**.
7. **TURNING SPEED.** Select the correct turning speed for your work, and allow the lathe to gain full speed before using.
8. **USING SHARP CHISELS.** Keep lathe chisels properly sharpened and held firmly in position when turning.
9. **OPERATING DAMAGED LATHE.** Never operate the lathe with damaged or worn parts.
10. **ADJUSTMENTS/MAINTENANCE.** Make sure your wood lathe is turned **OFF**, disconnected from its power source, and all moving parts have come to a complete stop before starting any inspection, adjustment, or maintenance procedure.
11. **STOPPING LATHE.** **DO NOT** stop the lathe by using your hand against the workpiece. Allow the lathe to stop on its own.
12. **AVOIDING ENTANGLEMENT.** Keep long hair and loose clothing articles such as sleeves, belts, and jewelry items away from the lathe spindle.

13. **FACEPLATE TURNING.** When faceplate turning, use lathe chisels on the downward spinning side of the workpiece only.
14. **SANDING/POLISHING.** Remove the tool rest when performing sanding or polishing operations on the rotating spindle.
15. **MATERIAL REMOVAL RATE.** Removing too much material at once may cause workpiece to fly out of the lathe.
16. **REDUCING WORKPIECE VIBRATION.** If the workpiece vibrates, immediately turn the lathe **OFF**. Check to make sure the workpiece is centered and balanced. Trim excess waste off corners with a bandsaw or table saw to reduce vibration. Make sure workpiece is securely attached in setup.

# ELECTRICAL

## 110V Operation

The Model W1752 is wired for 110V operation. Always connect this machine to a dedicated circuit (wire, breaker, plug, receptacle) with a verified ground, using the recommended circuit size and plugs/receptacles listed at the bottom of this page.

We recommend connecting this machine to a dedicated circuit with a verified ground, using the circuit size given below. Never replace a circuit breaker with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes.

This machine must be grounded! The electrical cord supplied with this machine comes with a grounding pin. If your outlet does not accommodate a ground pin, have it replaced by a qualified electrician.

If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, you may create a fire or circuit overload hazard—consult a qualified electrician to reduce this risk.

## Extension Cords

We do not recommend using an extension cord; however, if you have no alternative, use the following guidelines:

- Use a cord rated for Standard Service (S).
- Do not use a cord longer than 50 feet.
- Ensure that the cord has a ground wire and pin.
- Use the gauge size listed below as a minimum.

## Electrical Specifications

Operating Voltage	Amp Draw	Min. Circuit Size	Plug/Receptacle	Extension Cord
110V Operation	6 Amps	15A	NEMA 5-15	14 Gauge

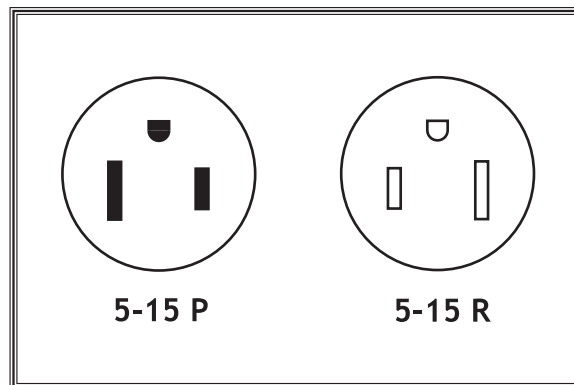
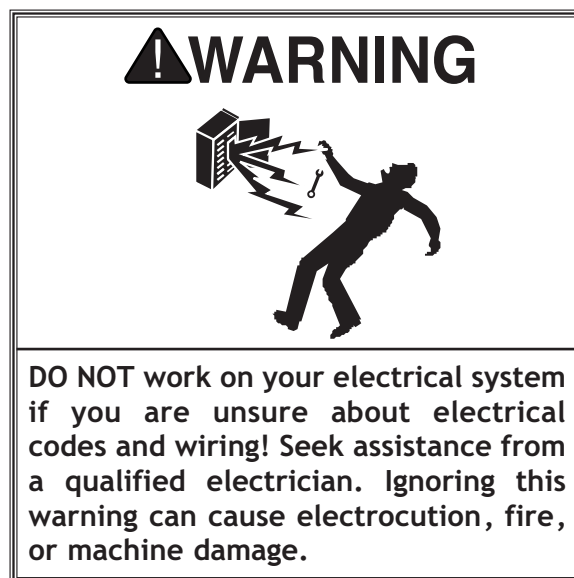


Figure 2. 5-15 plug and receptacle.





# SET UP

## Unpacking

The **SHOP FOX®** Model W1752 has been carefully packaged for safe transporting. If you notice the machine has been damaged, please contact your authorized **SHOP FOX®** dealer immediately.

## Inventory

The following is a description of the main components shipped with the **SHOP FOX®** Model W1752. Lay the components out to inventory them.

**Note:** Some parts and hardware may already be installed on the machine. Check the machine when you use this inventory list.

Box Inventory (Figure 3)	Qty
A. 10" Benchtop Lathe (Not Shown).....	1
B. Safety Glasses.....	1
C. Live Center .....	1
D. Spur Center.....	1
E. 3" Faceplate .....	1
F. Tool Rest .....	1
G. Knock Out Bar .....	1
H. Tool Rest Lock Handles .....	2

If any parts are missing, examine the packaging for the missing parts. For any missing parts, find the part number in the back of this manual and contact Woodstock International, Inc. at (360) 734-3482 or at [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz)

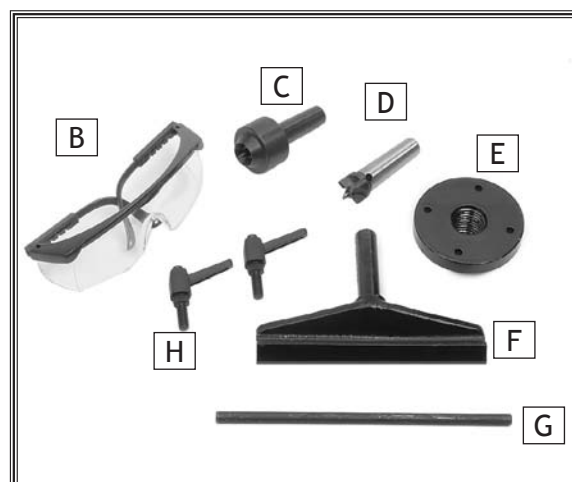
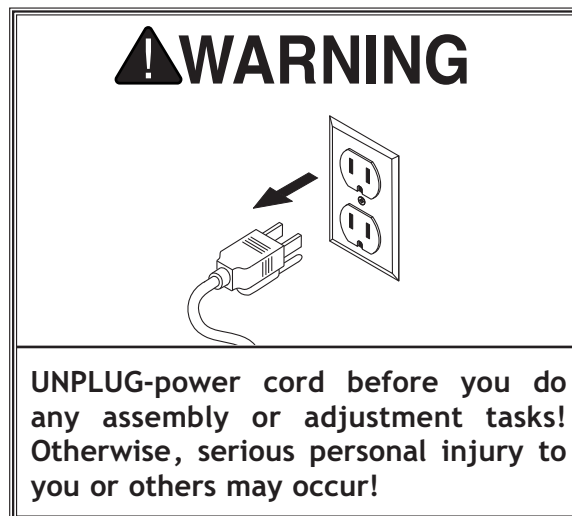
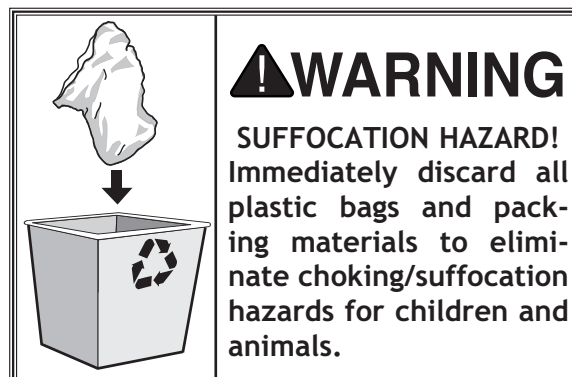


Figure 3. Box inventory.


## Machine Placement

- **Floor Load:** Some workbenches may require additional reinforcement to support both the machine and the operator. Make sure you take these precautions.
- **Working Clearances:** Consider existing and anticipated needs, size of material to be processed through the machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your lathe.
- **Lighting:** Lighting should be bright enough to eliminate shadow and prevent eye strain.
- **Electrical:** Electrical circuits must be dedicated or large enough to handle amperage requirements. Outlets must be located near each machine, so power or extension cords are clear of high-traffic areas. Follow local electrical codes for proper installation of new lighting, outlets, or circuits.


## Cleaning Machine

The bed and other unpainted parts of your lathe are coated with a waxy grease that protects them from corrosion during shipment. Clean this grease off with a solvent cleaner or citrus-based degreaser. **DO NOT** use chlorine-based solvents such as brake parts cleaner or acetone—if you happen to splash some onto a painted surface, you will ruin the finish.

	<p><b>!WARNING</b></p> <p><b>NEVER</b> use gasoline or other petroleum-based solvents to clean with. Most have low flash points, which make them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur if this warning is ignored!</p>
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	<p><b>!WARNING</b></p> <p>The Model W1752 is a heavy machine. <b>DO NOT</b> over-exert yourself while unpacking or moving your machine—get assistance.</p>
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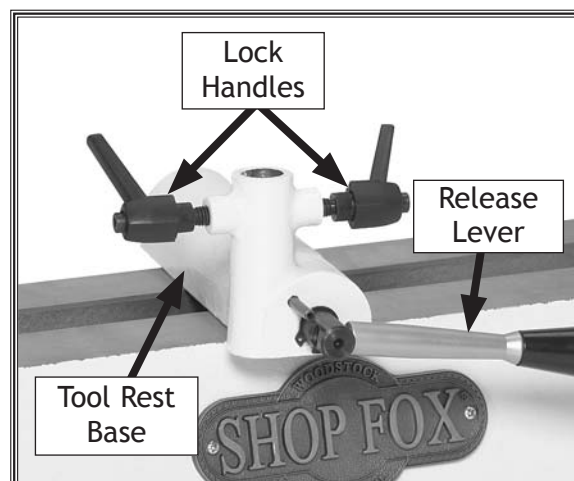
	<p><b>!CAUTION</b></p> <p><b>MAKE</b> your shop “child safe.” Ensure that your workplace is inaccessible to youngsters by closing and locking all entrances when you are away. <b>NEVER</b> allow untrained visitors in your shop when assembling, adjusting or operating equipment.</p>
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	<p><b>!CAUTION</b></p> <p><b>ALWAYS</b> work in well-ventilated areas far from possible ignition sources when using solvents to clean machinery. Many solvents are toxic when inhaled or ingested. Use care when disposing of waste rags and towels to be sure they <b>DO NOT</b> create fire or environmental hazards.</p>
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## Assembly

To install the tool rest, do these steps:

1. Turn the release lever on the tool rest base so it does not interfere with assembly.
2. Thread the tool rest lock handles into the tool rest base (**Figure 4**) until the threaded ends of the handles are flush with the inside of the shaft.
3. Insert the tool rest into the shaft and turn the handles to lock it as shown in **Figure 5**.
4. Install the optional bed extension, Model W1753 (**Page 25**). Refer to the instruction sheet included with the bed extension.



**Figure 4.** Tool rest lock handles installed.



**Figure 5.** Tool rest installed.

# Test Run

Complete this process once you have familiarized yourself with all instructions in this manual.

The test run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) the safety paddle switch works correctly.

To test run the mini wood lathe, do these steps:

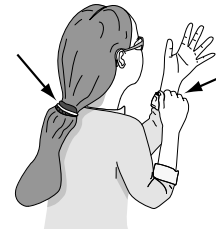
1. Read the entire instruction manual first!
2. Make sure all tools and foreign objects have been removed from the machine.
3. Review **Page 10** and connect your machine to the power source.
4. Flip the paddle switch up to turn the machine **ON**. Make sure that your hand stays poised over the switch in case you need to quickly turn the machine **OFF**.
  - If you suspect any problems, immediately turn the lathe **OFF** and disconnect the machine from the power, and refer to **Page 27** to troubleshoot/fix any problems before starting the lathe again.
  - If the source of an unusual noise or vibration is not readily apparent, contact our technical support for help at (360) 734-3482 or contact us online at [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz).
5. Turn the machine **OFF**.
6. Remove the safety key and attempt to turn the machine **ON**.
  - If the machine starts, stop it. The switch disabling feature is not working. This safety feature must work properly before proceeding. Contact our technical support for help.
  - If the machine does not start, the switch disabling feature is working.

## ! WARNING



Projectiles thrown from the machine could cause serious eye injury. Wear safety glasses during assembly and operation.

## ! WARNING



Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing rolled up and long hair tied up and away from machinery.

# OPERATIONS

## General

The Model W1752 will perform many types of operations that are beyond the scope of this manual. Many of these operations can be dangerous or deadly if performed incorrectly.

The instructions in this section are written with the understanding that the operator has the necessary knowledge and skills to operate this machine. **If at any time you are experiencing difficulties performing any operation, stop using the machine!**

If you are an inexperienced operator, we strongly recommend that you read books, trade articles, or seek training from an experienced *lathe* operator before performing any unfamiliar operations. **Above all, your safety should come first!**

### WARNING



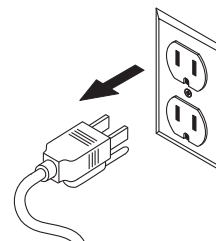
**READ** and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. **DO NOT** risk your safety by not reading!

### WARNING



Always wear safety glasses when operating the lathe. Failure to comply may result in serious personal injury.

### WARNING



**DO NOT** investigate problems or adjust the lathe while it is running. Wait until the machine is turned **OFF**, unplugged and all working parts have come to a complete stop before proceeding!

## Changing Speeds

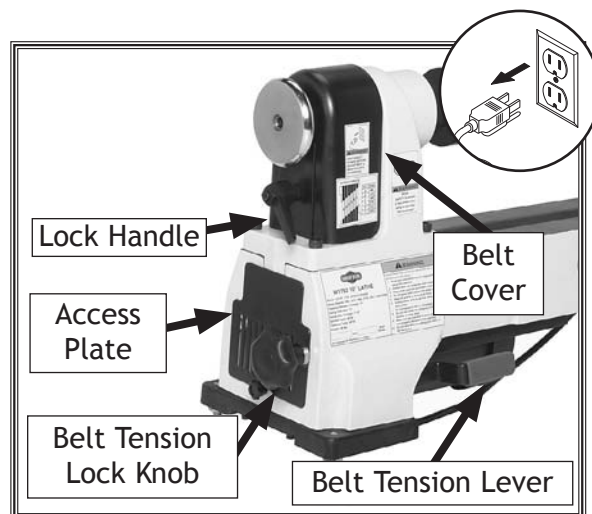
To change speeds, the belt in the headstock must be repositioned. A chart on the pulley cover shows the belt positions needed to make the lathe run at the desired speed.

To change speeds, do these steps:

1. Loosen the lock handle, remove the belt cover, and open the access plate (**Figure 6**).
2. Loosen the belt tension lock knob, and move the belt tension lever up to reduce tension on the belt.
3. Locate the desired speed on the speed chart on the belt cover, and move the belt to the desired grooves on the motor and spindle pulleys.

**For Example:** As indicated in the speed chart, pulley ratio B creates 1270 RPM (**Figure 7**).

4. Move the belt tension lever down, tighten the lock knob, and reinstall the access plate and belt cover.



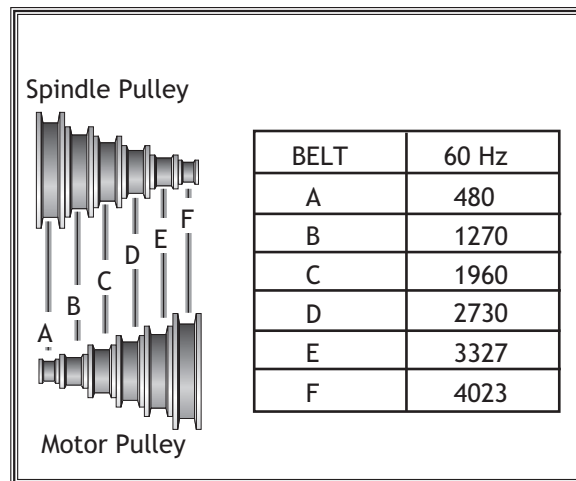
**Figure 6.** Belt Access.

## Adjusting Tailstock

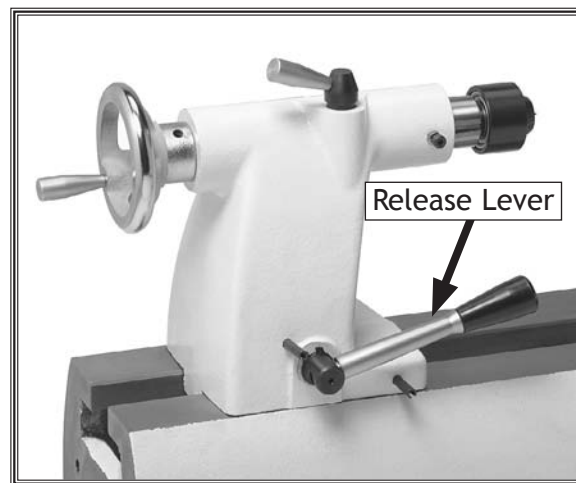
The tailstock is equipped with a cam-action clamping system to secure it to the lathe bed. When the lever is tightened, a locking plate lifts up and secures the tool rest to the bed.

To position the tailstock along the bed, do these steps:

1. Loosen the release lever and move the tailstock to the desired position (**Figure 8**).
2. Re-engage the release lever.
  - If the release lever will not lock the tailstock down onto the bed (either too loose or too tight), loosen or tighten the hex nut (located on the underside of the tailstock) in small increments as needed to achieve the proper clamping pressure.



**Figure 7.** W1752 Speed Chart.



**Figure 8.** Tailstock controls.



## Adjusting Tool Rest

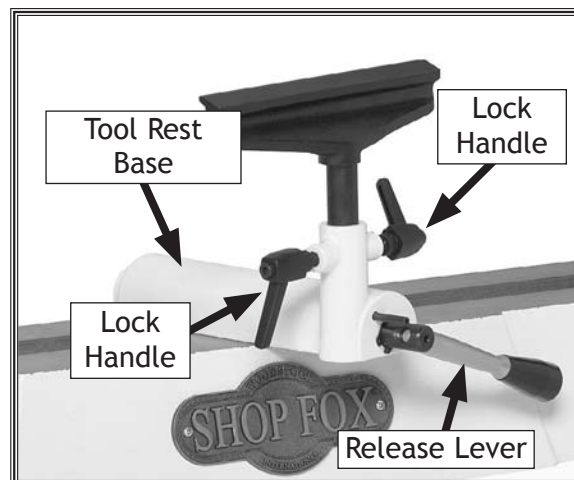
The tool rest is equipped with a cam-action clamping system to secure it to the lathe bed. When the lever is engaged, a locking plate lifts up and secures the tool rest base to the bed.

To position the tool rest base along the bed, do these steps:

1. Loosen the release lever and slide the tool rest base along the bed (**Figure 9**).
2. Re-engage the release lever to lock the tool rest base in place.
  - If the release lever will not lock the tool rest base onto the bed (either too loose or too tight), then loosen or tighten the hex nut (located on the underside of the tool rest base) in small increments as needed to achieve the proper clamping pressure.

To adjust the tool rest vertically, do these steps:

1. Loosen the lock handles (**Figure 9**) and adjust the tool rest vertically or swivel it as needed.
2. Tighten the lock handles.



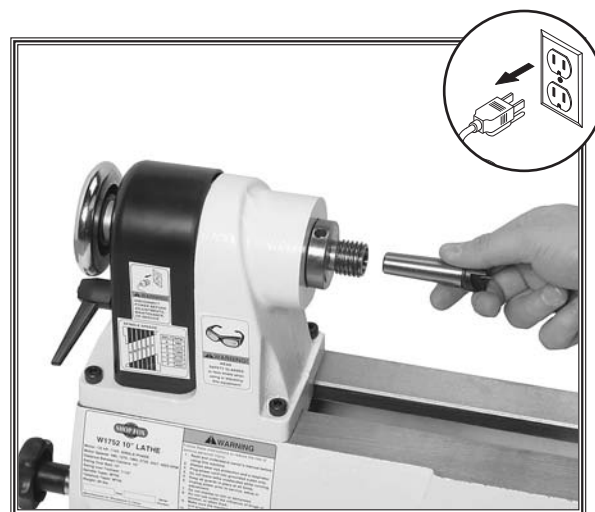
**Figure 9.** Tool rest controls.

## Installing/Removing Spur Center

The spur center installs into the headstock spindle with a taper fit.

To install the spur center, do these steps:

1. UNPLUG LATHE FROM POWER!
2. Insert the tapered end of the center into the spindle, and push it in quickly and firmly (see **Figure 10**).
3. Check that the center is securely installed by giving it a quick tug. (A properly installed center will not pull out by hand.)



**Figure 10.** Inserting spur center into spindle.

To remove the spur center with the knock-out bar, do these steps:

1. UNPLUG LATHE FROM POWER!
2. Hold a clean rag under the spindle or wear a glove to catch the center when you remove it.
3. Insert the knock-out bar through the outboard end of the spindle and tap the center (as shown in **Figure 11**). Catch the center as it falls out.

## Installing/Removing Live Center

To install the live center, do these steps:

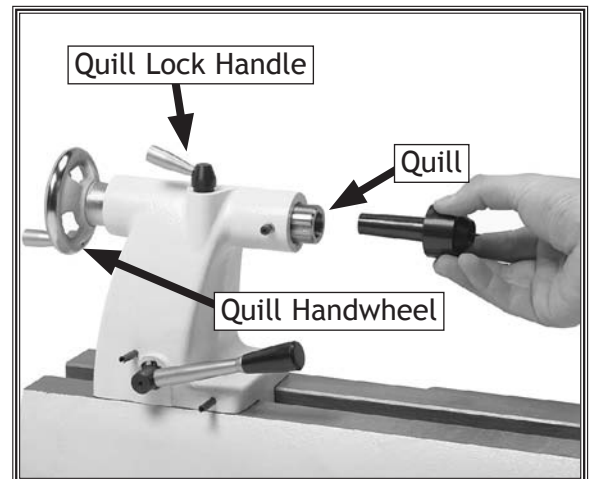
1. Loosen the quill lock handle (if locked) approximately half a turn counterclockwise.
2. Rotate the quill handwheel clockwise until the tailstock quill protrudes out of the tailstock housing about  $\frac{3}{4}$ ".
3. Insert the live center, as shown in **Figure 12**, and push firmly.
4. Tighten the lock handle.

To remove the live center, do these steps:

1. Turn the quill handwheel counterclockwise until the tailstock quill bottoms out, causing the center to be forced out of the quill.



**Figure 11.** Removing spur center using knock out bar.



**Figure 12.** Installing live center.

### **! WARNING**

The tailstock quill lock handle must always be locked down while the lathe is in use. The workpiece can be thrown from the lathe if this step is not observed. Also, the tailstock quill should not protrude from the tailstock housing more than 2" or the quill will not be supported enough. Failure to follow these warnings may result in personal injury.

## Installing/Removing Faceplate

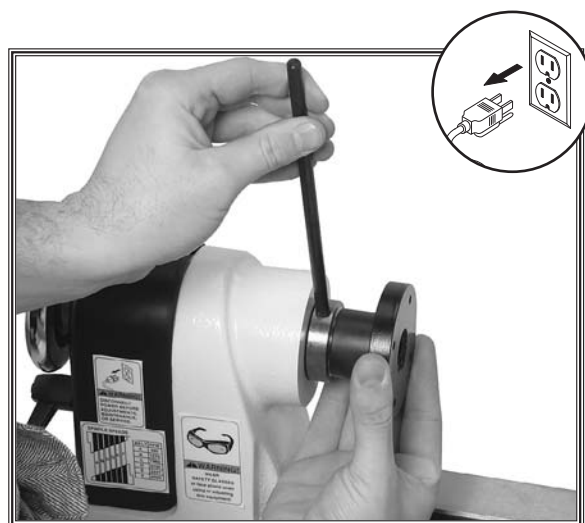
The faceplate can be installed only if the spur center has been removed from the headstock spindle. The knock-out bar is included with the lathe for installing and removing the faceplate.

To install the faceplate, do these steps:

1. UNPLUG LATHE FROM POWER!
2. Remove the spur center (see **Page 18**).
3. Thread the faceplate onto the headstock spindle.
4. Using the knock-out bar, hand tighten the faceplate as shown in **Figure 13**.

**Note:** Reverse **Steps 3-4** to remove the faceplate.

To mount a workpiece to your faceplate, refer to **Page 23**.



**Figure 13.** Tightening faceplate.

# Selecting Turning Tools

Lathe tools come in a variety of shapes and sizes and usually fall into five major categories.

- **Gouges**—Mainly used for rough cutting, detail cutting, and cove profiles. The rough gouge is a hollow, double-ground tool with a round nose, and the detail gouge is a hollow, double-ground tool with either a round or pointed nose. **Figure 14** shows an example of a gouge.
- **Skew Chisel**—A very versatile tool that can be used for planing, squaring, V-cutting, beading, and parting off. The skew chisel is flat, double-ground with one side higher than the other (usually at an angle of 20-40°). **Figure 15** shows an example of a skew chisel.
- **Scrapers**—Mainly used where access for other tools is limited, such as hollowing operations. This is a flat, double-ground tool that comes in a variety of profiles (Round Nose, Spear Point, Square Nose, etc.) to match many different contours. **Figure 16** shows an example of a round nose scraper.
- **Parting Tools**—Used for sizing and cutting off work. This is a flat tool with a sharp pointed nose that may be single- or double-ground. **Figure 17** shows an example of a parting tool.
- **Specialty Tools**—These are the unique, special function tools to aid in hollowing, bowl making, cutting profiles, etc.



Figure 14. Gouge.

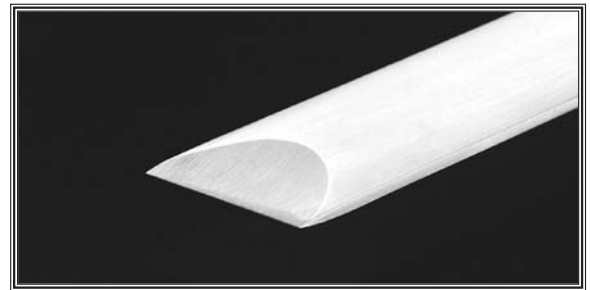


Figure 15. Skew chisel.



Figure 16. Round nose scraper.

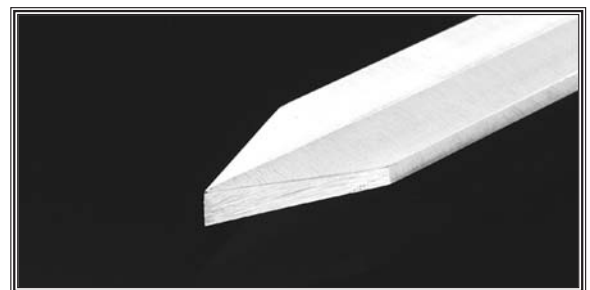


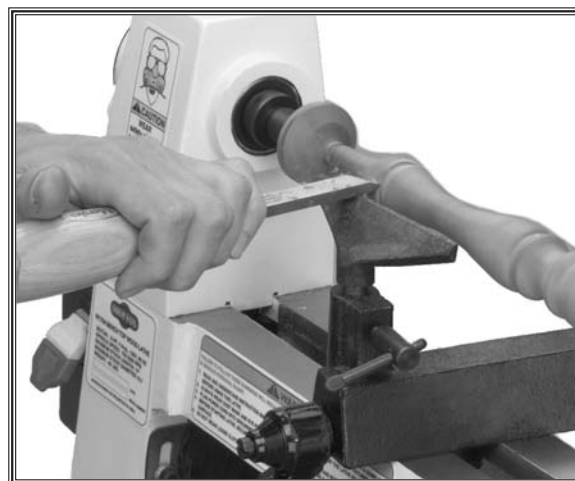
Figure 17. Parting tool.

# Spindle Turning

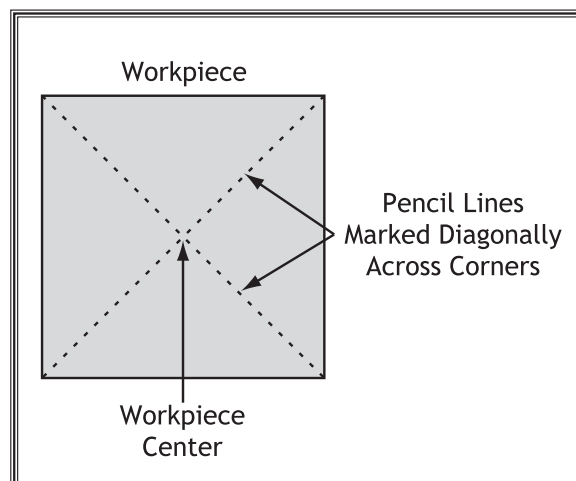
Spindle turning (**Figure 18**) is the operation performed when a workpiece is mounted between the headstock and the tailstock.

To set up a spindle turning operation, do these steps:

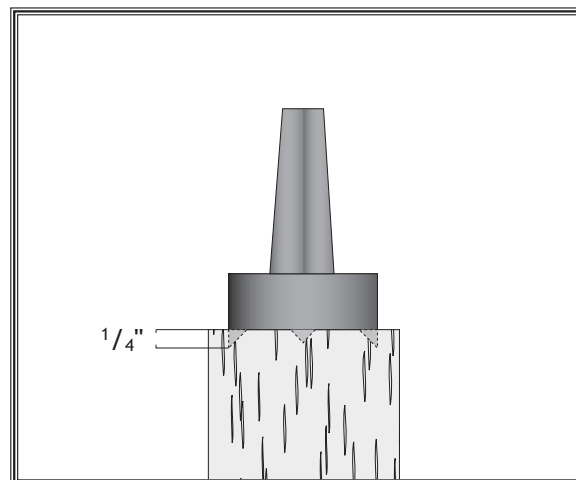
1. Mark both ends of your workpiece by drawing diagonal lines from corner to corner. The intersection point of these lines will show you the center of your workpiece. See **Figure 19** for details.
2. Using a wood mallet, tap the point of the spur center into the center of the workpiece, so that it leaves a center mark, then remove the spur center.
3. Using a  $\frac{1}{8}$ " drill bit, drill a  $\frac{3}{16}$ " deep hole at the center mark.
4. Cut the corners off your workpiece if it is over 2" x 2" to make turning safer and easier.
5. Drive the spur center into the center of the workpiece with a wood mallet to embed it at least  $\frac{1}{4}$ ", as shown in **Figure 20**.



**Figure 18.** Typical spindle turning operation.



**Figure 19.** Workpiece marked diagonally from corner to corner to determine the center.



**Figure 20.** Spur center properly embedded.

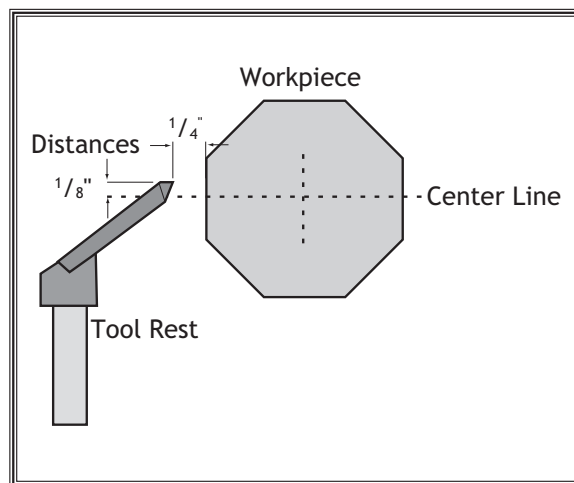
6. With the workpiece still attached, insert the spur center into the headstock spindle.
7. With the live center installed in the tailstock, slide the tailstock toward the workpiece until the live center touches the workpiece centerpoint, then lock the tailstock in this position.
8. Use the quill handwheel to push the live center into the workpiece at least a  $\frac{1}{4}$ ".
9. Position the tool rest approximately  $\frac{1}{4}$ " away from the workpiece and approximately  $\frac{1}{8}$ " above the center line, as shown in **Figure 21**.
10. Test the setup by hand turning the workpiece to make sure there is enough clearance all the way around before starting.

### Spindle Turning Tips:

- When turning the lathe **ON**, stand to the side of the spinning direction until the lathe reaches full speed and you can verify that the lathe will not throw the workpiece.
- Use the slowest speed when starting or stopping the lathe, and when rough cutting.
- Select the right speed for the size of workpiece you are turning. Use slower speeds for large workpieces (4" diameter and over); use the middle range speeds for medium sized workpieces (2" to 4" diameter); and use faster speeds for small sized workpieces (under 2" in diameter).
- Keep the turning tool on the tool rest the **ENTIRE** time that it is in contact with the workpiece.
- Learn the correct techniques for each tool you will use. If you are unsure, read books or magazines about lathe techniques and seek training from experienced users.
- Turn the lathe **OFF** immediately if the workpiece vibrates excessively. Check to make sure the workpiece is centered and balanced. Remove the workpiece and trim excess waste off corners with a bandsaw or table saw to reduce vibration. Make sure workpiece is securely attached in the setup.

## ! WARNING

Do not press the workpiece too firmly with the tailstock or the bearings will bind and overheat. Likewise, do not adjust too loosely or the workpiece will spin off the lathe. Use good judgment. Serious personal injury could result if care is not taken.



**Figure 21.** Tool rest set  $\frac{1}{8}$ " above the center line and  $\frac{1}{4}$ " away from workpiece.



## Faceplate Turning

Faceplate turning (**Figure 22**) is when a workpiece is mounted to the 3" faceplate, which is mounted to the headstock spindle. This type of turning is usually done with open-faced workpieces like bowls.

To mount your workpiece to the faceplate, do these steps:

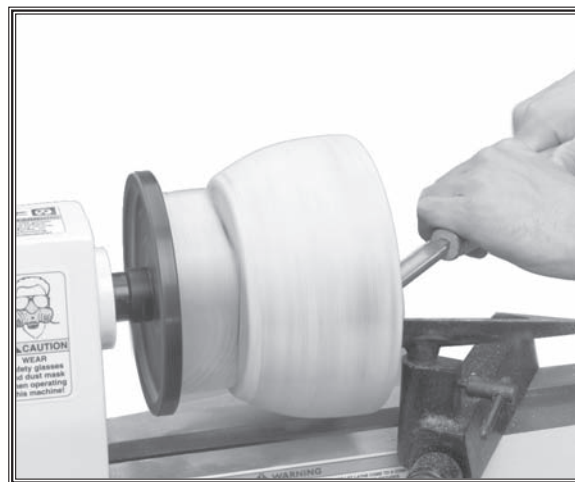
1. Find the center of your workpiece in the same manner as when spindle turning.
2. Cut off the corners of the workpiece.
3. Center the faceplate on the workpiece and attach it through the faceplate holes with wood screws.
4. Thread the faceplate onto the headstock spindle and tighten securely.

**Note:** If screws cannot be placed in the workpiece, then a backing block can be glued to the workpiece and attached to the faceplate with screws.

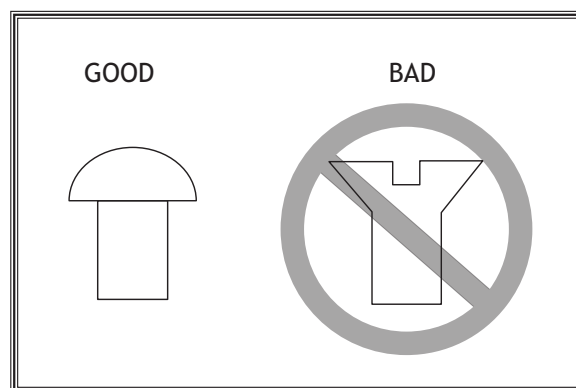
**NOTICE:** Only use tap screws or wood screws with non-tapered heads (**Figure 23**) to attach the faceplate to the workpiece. Do NOT use drywall screws or screws with tapered heads because these can split the faceplate, or the screws may snap off during operation.

To mount your workpiece to a backing block, do these steps:

1. Make the backing block (**Figure 24**) from a piece of scrap wood that is flat on both sides.
2. Locate and mark the center of both the workpiece and the backing block.
3. Drill a  $\frac{1}{4}$ " hole in the center of the backing block.
4. Glue the center of the backing block to the center of the workpiece (look through the drilled hole to line up centers), clamp the backing block to the workpiece, and wait for the glue to cure according to the manufacturer's recommendation.



**Figure 22.** Typical faceplate turning operation.



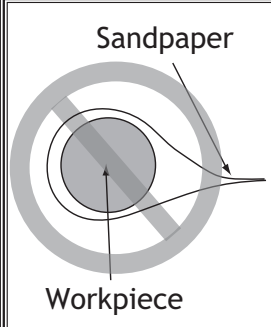
**Figure 23.** Correct and incorrect screw types for mounting faceplate to workpiece.

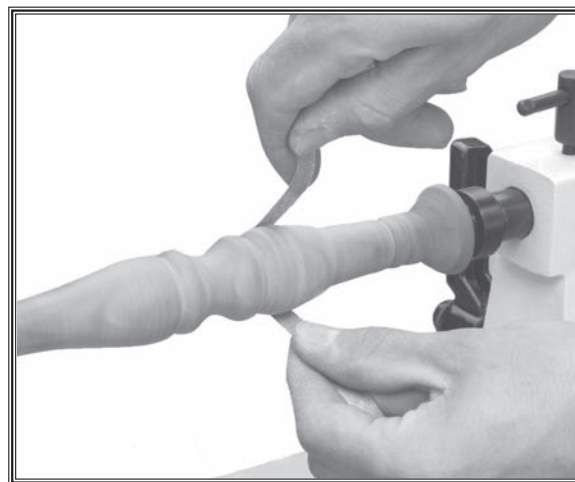


**Figure 24.** Typical example of mounting faceplate to a backing block.

## Sanding/Finishing

After turning, the workpiece can be sanded, as shown in **Figure 25**, and finished (in the same manner) before removing it from the lathe.

 <p>Sandpaper</p> <p>Workpiece</p>	<p><b>! CAUTION</b> <b>ENTANGLEMENT HAZARD!</b></p> <p>Wrapping the sandpaper completely around the workpiece can pull your hands into the moving workpiece and may cause injury. Never wrap sandpaper completely around the workpiece!</p>
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**Figure 25.** Typical sanding operation.

Whenever sanding or finishing, move the tool rest holder out of the way to increase personal safety and gain adequate working room.

# ACCESSORIES

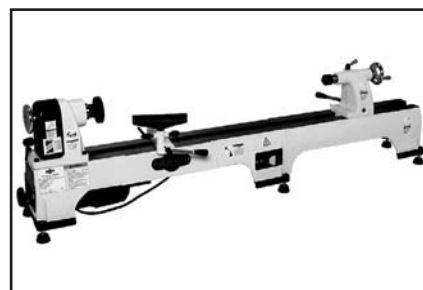
## Lathe Accessories

The following lathe accessories may be available through your local Woodstock International Inc. Dealer. If you do not have a dealer in your area, these products are also available through online dealers. Please call or e-mail Woodstock International Inc. Customer Service to get a current listing of dealers at: 1-800-545-8420 or at [sales@woodstockint.com](mailto:sales@woodstockint.com).

The **D2056 SHOP FOX® Tool Table** is great for bench-top tools such as chop saws, drill presses, scroll saws, and bandsaws. Support cross braces on top provide incredible strength and capacity. Flared legs and adjustable rubber feet ensure stability and reduce machine vibration. Butcher block finish table top measures 13" x 23" and is 30½" tall. 700 lb. capacity.



The **W1752 SHOP FOX® Bed Extension** enables your W1753 lathe to turn to 38" between centers. (Model W1752 shown with W1753 bed extension.)



The **D2304 6-Piece Deluxe HSS Lathe Chisel Set** features beefy ash handles for unsurpassed control, brass ferrules and high speed steel blades. Includes: a 17" long  $\frac{13}{16}$ " Parting Tool,  $\frac{13}{16}$ " Round Nose and  $\frac{3}{8}$ " Gouge; a 19" long 1" Skew, a  $\frac{5}{8}$ " Gouge and a  $22\frac{3}{4}$ " long  $\frac{3}{8}$ " Gouge.



# MAINTENANCE

## General

Regular periodic maintenance on your **SHOP FOX®** Model W1752 will ensure its optimum performance. Make a habit of inspecting your machine each time you use it.

Check for the following conditions and repair or replace when necessary:

### Daily Check:

- Loose mounting bolts.
- Worn or damaged wires.
- Worn switch
- Any other unsafe condition.

### Monthly Check:

- Belt tension, damage, or wear.
- Clean/vacuum dust buildup off of motor.

## Cleaning

Cleaning the Model W1752 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

## Unpainted Cast Iron

Protect the unpainted cast iron surfaces on the lathe by wiping them clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

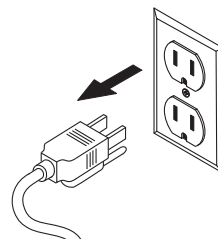
Keep the bed rust-free with regular applications of quality metal protectant products.

## Changing Belt

To change the belt, do these steps:

1. Perform **Steps 1-2** in the **Changing Speeds** procedure on **Page 16**.
2. Roll the belt off of the pulleys and slide it under the belt cover plates.
3. Reverse **Steps 1-2** to reinstall the belt.

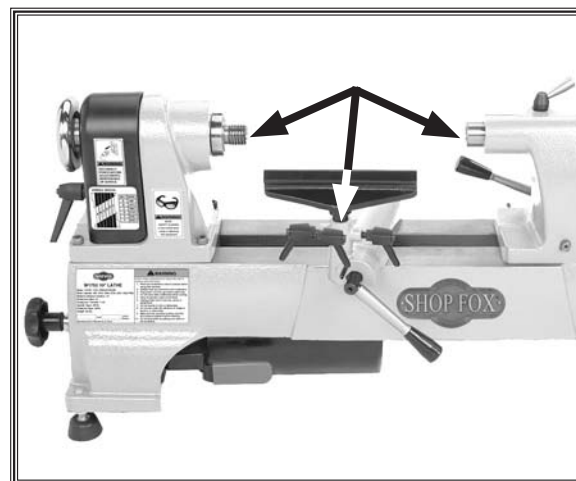
## WARNING



**MAKE SURE** that your machine is unplugged during all maintenance procedures! If this warning is ignored, serious personal injury may occur.

## Lubrication

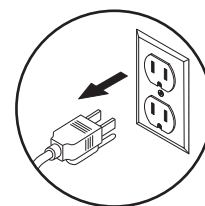
Lubricate the locations shown in **Figure 26** with light machine oil.



**Figure 26.** Lubrication locations.

# SERVICE

## Troubleshooting



This section covers the most common problems and corrections with this type of machine. **WARNING! DO NOT** make any adjustments until power is disconnected and moving parts have come to a complete stop!

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> <li>1. Power supply is at fault/switched OFF.</li> <li>2. Plug/receptacle is at fault or wired incorrectly.</li> <li>3. Lockout key is at fault.</li> <li>4. Motor ON button or ON/OFF switch is at fault.</li> <li>5. Wiring is open.</li> <li>6. Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure hot lines have correct voltage on all legs and main power supply is switched ON.</li> <li>2. Test for good contacts; correct the wiring.</li> <li>3. Install/replace lockout key; replace switch.</li> <li>4. Replace faulty ON button or ON/OFF switch.</li> <li>5. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.</li> <li>6. Test/repair/replace.</li> </ol>
Machine stalls or is under-powered.	<ol style="list-style-type: none"> <li>1. Plug/receptacle is at fault.</li> <li>2. Motor bearings are at fault.</li> <li>3. Motor has overheated.</li> <li>4. Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Test for good contacts; correct the wiring.</li> <li>2. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> <li>3. Clean off motor, let cool, and reduce workload.</li> <li>4. Test/repair/replace.</li> </ol>
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> <li>1. Workpiece or chuck is at fault.</li> <li>2. Motor or component is loose.</li> <li>3. Motor fan is rubbing on fan cover.</li> <li>4. Motor bearings are at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Center workpiece in chuck or face plate; reduce RPM; replace defective chuck.</li> <li>2. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid.</li> <li>3. Replace dented fan cover; replace loose/damaged fan.</li> <li>4. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> </ol>
Motor automatically shuts off.	<ol style="list-style-type: none"> <li>1. Short circuit in motor or loose connections.</li> <li>2. Incorrect fuses/circuit breakers.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect connections on motor for loose or shorted terminals or worn insulation.</li> <li>2. Repair cause of short and or install correct fuses or circuit breakers.</li> </ol>

## Operation

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Vibration noise while machine is running; noise changes when speed is changed.	<ol style="list-style-type: none"> <li>1. Belt cover loose.</li> <li>2. Belt cover bent or dented and is making contact with the motor pulley or belt.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten the belt cover lock handle; if necessary install a soft, vibration dampening material (between the belt cover and the headstock casting).</li> <li>2. Remove belt cover and inspect the inside for dents, bends, or indications of rubbing. Tap out the dent with a rubber mallet, bend back into proper shape, or shim belt cover away from the motor pulley.</li> </ol>

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Vibration noise while machine is running; noise remains constant when speed is changed.	1. Dented fan cover on motor.	1. Replace or adjust fan cover. Inspect motor fan and replace if damaged.
Excessive vibration.	1. Workpiece mounted incorrectly. 2. Workpiece warped, out of round, or is flawed. 3. Spindle speed is set too fast for mounted workpiece. 4. Lathe is resting on an uneven surface. 5. Motor mount bolts are loose. 6. Belt is worn or damaged. 7. Spindle bearings are worn.	1. Re-mount workpiece, making sure that centers are embedded in true center of workpiece. 2. Cut workpiece to correct, or use a different workpiece. 3. Reduce the spindle speed. 4. Shim or adjust feet to remove any wobbles. 5. Tighten motor mount bolts. 6. Replace belt. 7. Replace spindle bearings.
Chisels grab or dig into workpiece.	1. Tool rest set too low. 2. Tool rest set too far from workpiece. 3. Wrong chisel/tool being used. 4. Chisel/tool dull.	1. Set tool rest higher. See <b>Page 22</b> for how to properly set the tool rest height. 2. Move the tool rest closer to the workpiece. See <b>Page 22</b> for the proper workpiece/tool rest clearance. 3. Use the correct chisel/tool; educate yourself by reading books, trade magazines, or seeking help from an experienced lathe operator. 4. Sharpen or replace the chisel/tool you are using.
Bad surface finish.	1. Wrong spindle speed. 2. Dull chisel or wrong chisel being used for the operation.	1. Use trial-and-error to find a better spindle speed. 2. Sharpen chisel or try a different chisel.
Tailstock moves.	1. Tailstock mounting bolt loose. 2. Too much clamping pressure applied by tailstock. 3. Bed surface is oily or greasy.	1. Tighten. 2. Apply less clamping pressure with tailstock. 3. Clean bed surface to remove oil/grease.
Can't remove tapered tool from tailstock barrel.	1. Tailstock barrel had not retracted all the way back into the tailstock. 2. Debris was not removed from taper before inserting into barrel.	1. Turn the barrel handwheel until it forces taper out of barrel. 2. Always make sure that taper surfaces are clean.

# Wiring Diagram W1752

## **⚠ DANGER**

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

## COLOR KEY

BLACK	
WHITE	
GREEN	
RED	

## PADDLE SWITCH (viewed from behind)

## NOTICE

This motor wiring diagram is current at the time of printing; however, always use the diagram on the inside of the junction box cover when rewiring your motor!

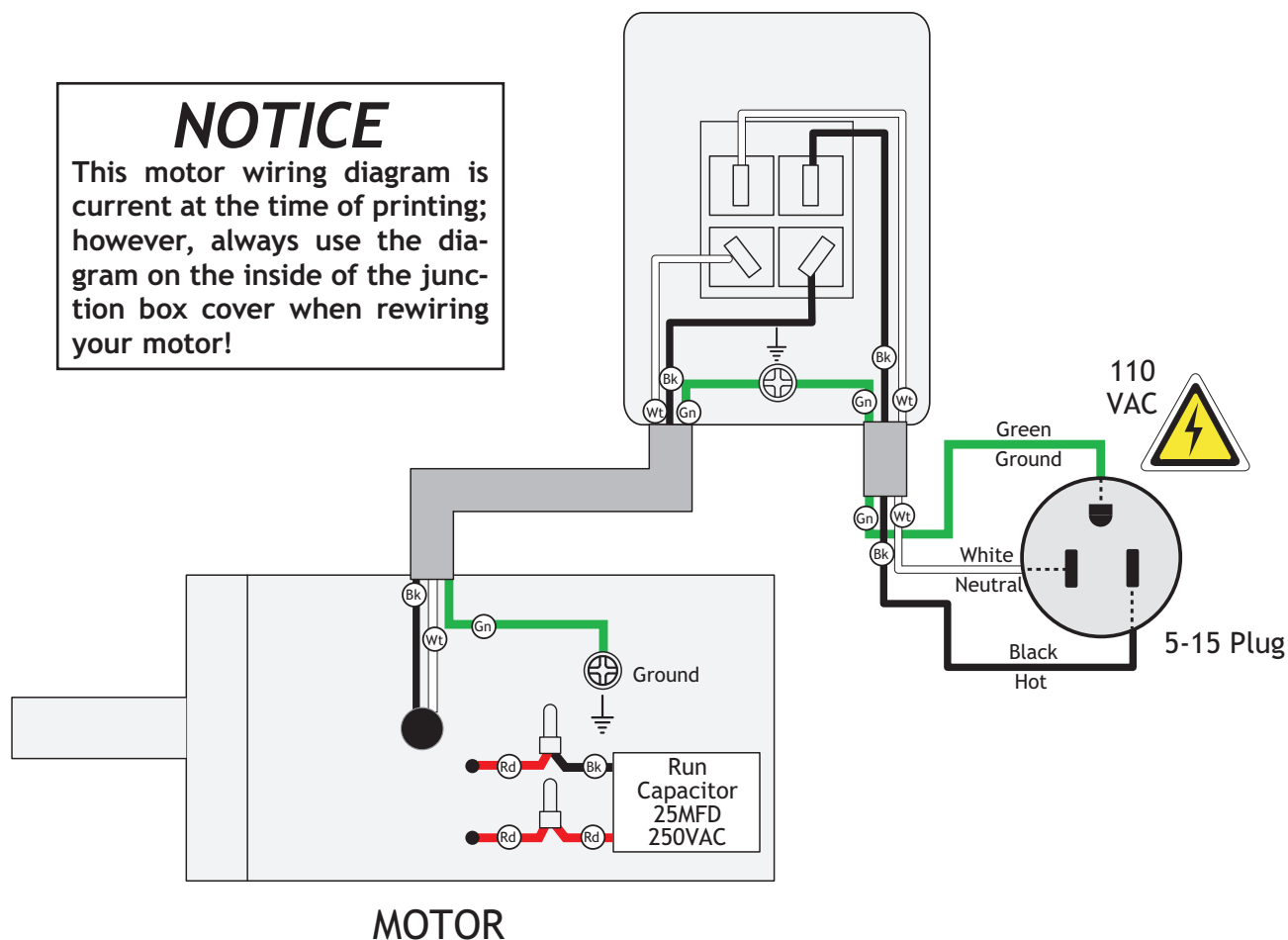


Figure 27. Motor connections.

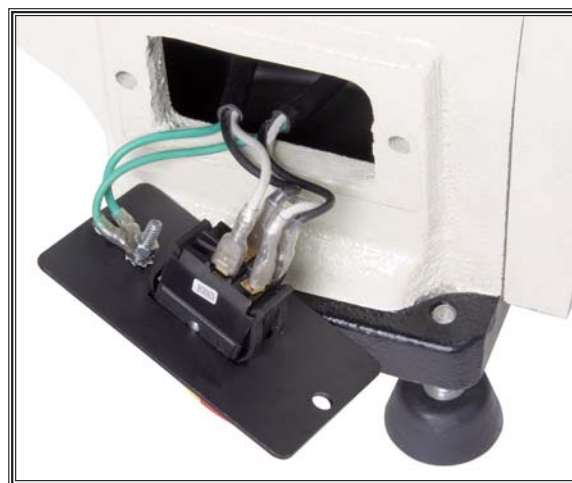
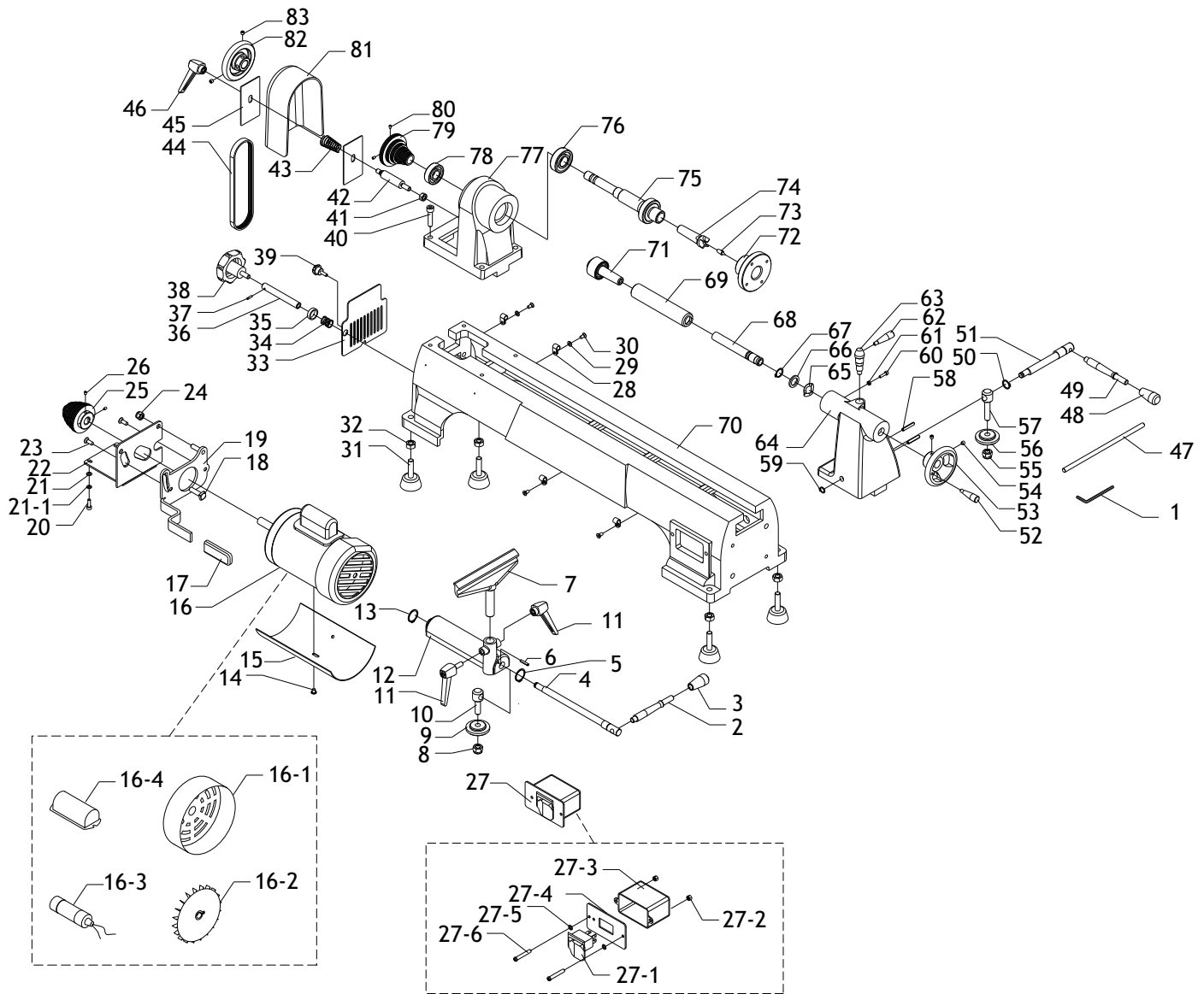


Figure 28. Switch connections.



# PARTS



# Parts List

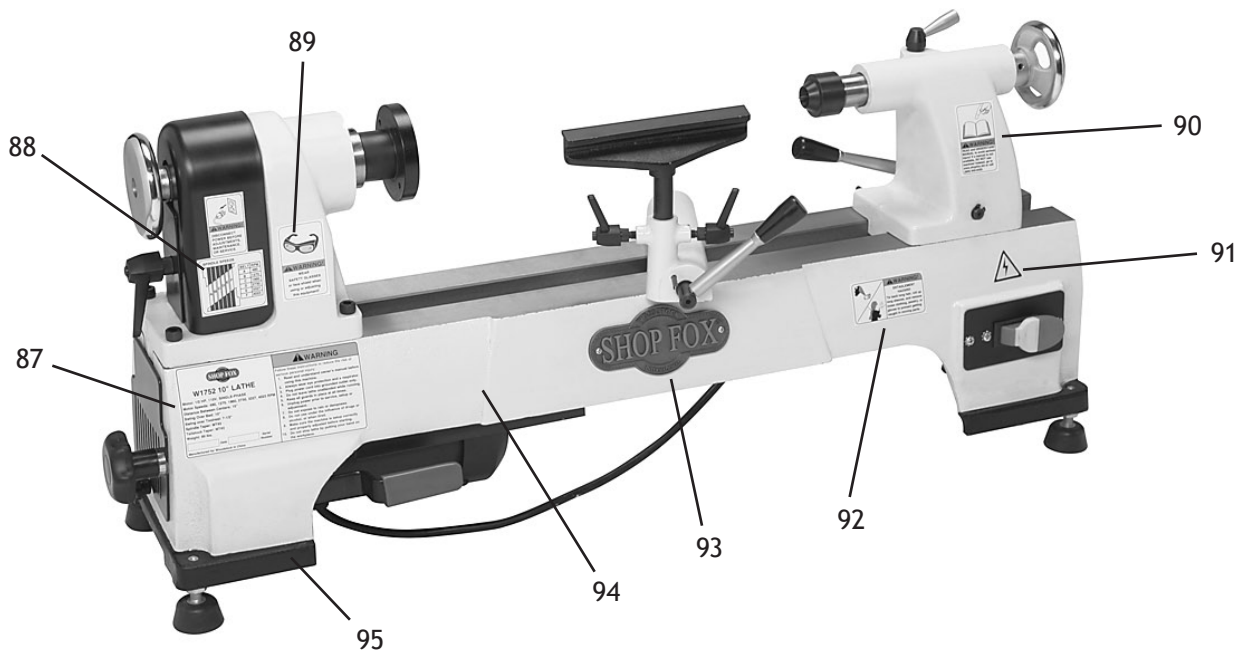
REF	PART #	DESCRIPTION
1	XPAW02.5M	HEX WRENCH 2.5MM
2	X1752002	TOOL REST RELEASE LEVER
3	X1752003	LEVER KNOB
4	X1752004	ECCENTRIC SHAFT
5	XPR02M	EXT RETAINING RING 14MM
6	XPRP39M	ROLL PIN 4 X 20
7	X1752007	TOOL REST
8	XPLN05M	LOCK NUT M10-1.5
9	X1752009	SLIDE COLLAR
10	X1752010	ADJUST SHAFT
11	X1752011	TOOL REST LOCK HANDLE M6-1
12	X1752012	TOOL POST BASE
13	XPR01M	EXT RETAINING RING 10MM
14	X1752014	LOCTITE SCREW 10-24 X 6
15	X1752015	DUST GUARD
16	X1752016	MOTOR
16-1	X1752016-1	FAN COVER
16-2	X1752016-2	FAN
16-3	X1752016-3	CAPACITOR 25MFD 250VAC
16-4	X1752016-4	CAPACITOR COVER
17	X1752017	RUBBER SLEEVE
18	X1752018	SQUARE HEAD BOLT
19	X1752019	TENSION BRACKET
20	X1752020	CAP SCREW M5-.8 X 15
21	XPW02M	FLAT WASHER 5MM
21-1	XPLW01M	LOCK WASHER 5MM
22	X1752022	MOTOR PLATE
23	XPS11M	PHLP HD SCR M6-1 X 16
24	XPLN04M	LOCK NUT M8-1.25
25	X1752025	MOTOR PULLEY
26	XPSS79M	SET SCREW M4-.7 X 6
27	X1752027	SWITCH
27-1	X1752027-1	SWITCH W/SAFETY KEY
27-2	XPN07	HEX NUT 10-24
27-3	X1752027-3	SWITCH BOX
27-4	X1752027-4	SWITCH PLATE
27-5	XPTLW02M	EXT TOOTH WASHER 5MM
27-6	XPS10	PHLP HD SCR 10-24 X 1-1/2
28	X1752028	WIRE CLAMP
29	XPW02M	FLAT WASHER 5MM
30	XPS09M	PHLP HD SCR M5-.8 X 10
31	X1752031	RUBBER FOOT
32	XPN08	HEX NUT 3/8-16
33	X1752033	LOWER PULLEY ACCESS PLATE
34	X1752034	COMPRESSION SPRING
35	X1752035	SPACER 18MM
36	X1752036	SHAFT

REF	PART #	DESCRIPTION
37	XPRP61M	ROLL PIN 3 X 12
38	X1752038	BELT TENSION LOCK KNOB
39	X1752039	THUMB SCREW M5-.8 X 15
40	XPSB40M	CAP SCREW M8-1.25 X 35
41	XPN03M	HEX NUT M8-1.25
42	X1752042	THREADED SHAFT
43	X1752043	COMPRESSION SPRING
44	X1752044	ULTR-FLEX BELT 7 X 3.4 X 600MM
45	X1752045	GUARD PLATE
46	X1752046	LOCK HANDLE
47	X1752047	KNOCK OUT BAR
48	X1752048	LEVER KNOB
49	X1752049	TAILSTOCK RELEASE LEVER
50	XPR06M	EXT RETAINING RING 16MM
51	X1752051	ECCENTRIC SHAFT
52	X1752052	QUILL HANDWHEEL HANDLE
53	X1752053	TAILSTOCK HANDWHEEL
54	XPSS02M	SET SCREW M6-1 X 6
55	XPLN05M	LOCK NUT M10-1.5
56	X1752056	SLIDE COLLAR
57	X1752057	ADJUST SHAFT
58	XPRP05M	ROLL PIN 5 X 30
59	XPR01M	EXT RETAINING RING 10MM
60	XPSB16M	CAP SCREW M4-.7 X 16
61	XPN04M	HEX NUT M4-.7
62	X1752062	QUILL LOCK HANDLE
63	X1752063	ECCENTRIC SHAFT
64	X1752064	TAILSTOCK CASTING
65	X1752065	RUBBER COLLAR
66	XPW14M	FLAT WASHER 15MM
67	XPR05M	EXT RETAINING RING 15MM
68	X1752068	TAILSTOCK LEAD SCREW
69	X1752069	TAILSTOCK QUILL
70	X1752070	BEDWAY
71	X1752071	LIVE CENTER MT#2
72	X1752072	FACEPLATE 3"
73	X1752073	INDEXED SPINDLE
74	X1752074	SPUR CENTER MT#2
75	X1752075	SPINDLE
76	XP6005	BALL BEARING 6005ZZ
77	X1752077	HEADSTOCK CASTING
78	XP6004	BALL BEARING 6004ZZ
79	X1752079	SPINDLE PULLEY
80	XPSS79M	SET SCREW M4-.7 X 6
81	X1752081	PULLEY SAFETY COVER
82	X1752082	HEADSTOCK HANDWHEEL
83	XPSS02M	SET SCREW M6-1 X 6

# Label Placement

## ⚠ WARNING

Safety labels warn about machine hazards and how to prevent machine damage or injury. The owner of this machine **MUST** maintain the original location and readability of all labels on this machine. If any label is removed or becomes unreadable, **REPLACE** that label before allowing the machine to enter service again. Contact Woodstock International, Inc. at (360) 734-3482 or [www.shopfoxtools.com](http://www.shopfoxtools.com) to order new labels.



REF	PART #	DESCRIPTION
87	X1752087	MACHINE ID LABEL
88	X1752088	DISCONNECT POWER-SPINDLE SPEEDS LABEL
89	X1752089	SAFETY GLASSES LABEL 1-1/2" X 2-1/2"
90	X1752090	READ MANUAL LABEL 1-1/2" X 2-1/2"
91	X1752091	ELECTRICITY LABEL
92	X1752092	ENTANGLEMENT HAZARD LABEL
93	X1752093	SHOP FOX LOGO PLATE
94	X1752094	PAINT FOR SHOP FOX MACHINES
95	X1752095	BLACK BASE PAINT

# Notes

# Notes

# Warranty Registration

Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone # \_\_\_\_\_ Email \_\_\_\_\_ Invoice # \_\_\_\_\_  
 Model # \_\_\_\_\_ Serial # \_\_\_\_\_ Dealer Name \_\_\_\_\_ Purchase Date \_\_\_\_\_

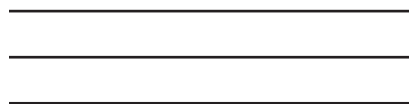
*The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. Of course, all information is strictly confidential.*

1. How did you learn about us?  
     \_\_\_\_\_ Advertisement      \_\_\_\_\_ Friend      \_\_\_\_\_ Local Store  
     \_\_\_\_\_ Mail Order Catalog      \_\_\_\_\_ Website      \_\_\_\_\_ Other:
2. How long have you been a woodworker/metalworker?  
     \_\_\_\_\_ 0-2 Years      \_\_\_\_\_ 2-8 Years      \_\_\_\_\_ 8-20 Years      \_\_\_\_\_ 20+ Years
3. How many of your machines or tools are Shop Fox?  
     \_\_\_\_\_ 0-2      \_\_\_\_\_ 3-5      \_\_\_\_\_ 6-9      \_\_\_\_\_ 10+
4. Do you think your machine represents a good value?      \_\_\_\_\_ Yes      \_\_\_\_\_ No
5. Would you recommend Shop Fox products to a friend?      \_\_\_\_\_ Yes      \_\_\_\_\_ No
6. What is your age group?  
     \_\_\_\_\_ 20-29      \_\_\_\_\_ 30-39      \_\_\_\_\_ 40-49  
     \_\_\_\_\_ 50-59      \_\_\_\_\_ 60-69      \_\_\_\_\_ 70+
7. What is your annual household income?  
     \_\_\_\_\_ \$20,000-\$29,000      \_\_\_\_\_ \$30,000-\$39,000      \_\_\_\_\_ \$40,000-\$49,000  
     \_\_\_\_\_ \$50,000-\$59,000      \_\_\_\_\_ \$60,000-\$69,000      \_\_\_\_\_ \$70,000+
8. Which of the following magazines do you subscribe to?  

_____ Cabinet Maker	_____ Popular Mechanics	_____ Today's Homeowner
_____ Family Handyman	_____ Popular Science	_____ Wood
_____ Hand Loader	_____ Popular Woodworking	_____ Wooden Boat
_____ Handy	_____ Practical Homeowner	_____ Woodshop News
_____ Home Shop Machinist	_____ Precision Shooter	_____ Woodsmith
_____ Journal of Light Cont.	_____ Projects in Metal	_____ Woodwork
_____ Live Steam	_____ RC Modeler	_____ Woodworker West
_____ Model Airplane News	_____ Rifle	_____ Woodworker's Journal
_____ Modeltec	_____ Shop Notes	_____ Other:
_____ Old House Journal	_____ Shotgun News	

9. Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

FOLD ALONG DOTTED LINE



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BELLINGHAM, WA 98227-2309



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TAPE ALONG EDGES--PLEASE DO NOT STAPLE



# WARRANTY

Woodstock International, Inc. warrants all Shop Fox machinery to be free of defects from workmanship and materials for a period of two years from the date of original purchase by the original owner. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, lack of maintenance, or reimbursement of third party expenses incurred.

Woodstock International, Inc. will repair or replace, at its expense and at its option, the Shop Fox machine or machine part, which in normal use has proven to be defective, provided that the original owner returns the product prepaid to a Shop Fox factory service center with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.'s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that Shop Fox machinery complies with the provisions of any law or acts. In no event shall Woodstock International, Inc.'s liability under this warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

Every effort has been made to ensure that all Shop Fox machinery meets high quality and durability standards. We reserve the right to change specifications at any time because of our commitment to continuously improve the quality of our products.



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